Subject: Enclosure tuning questions
Posted by JLapaire on Fri, 05 Apr 2002 11:45:31 GMT
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I have two pairs of 12" Daytons (Qts=.37 Qd=2.7 Fs=28 Vas=5.11 cu ft) that I'd like to put in enclosures and I've been noodling around with BoxPlot and PIAlign to figure out how to get the most out of them in the smallest boxes. If I'm understanding it corectly, PIAlign gives me a volume of about half of BoxPlots, with a longer port, for a given F3. I've tried the drivers singly and with Vas/2 for isobarik coupling and find that the ratio stays roughly the same. Smaller box, tuned lower?Also, will 2 drivers in isobarik give the same "gain" as two drivers side by side on the same baffle?Thanks for the helpJohn

Subject: Re: Enclosure tuning questions
Posted by Adam on Fri, 05 Apr 2002 12:02:15 GMT
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Hey,Tuning a box lower while making it smaller can help extend the low end a little more, but in the end you always get less low frequency extension. The only thing that differs it from a high tuned ported box is there is no response peak and the response rolls off shallow down to Fb, where it then rolls off.And the answer is no, running two drivers isobarik will not give you any effeciency increase.If you are planning on running your woofers isobarik on any conventional Pi speakers, they won't work unless you shrink the box volume appropriately and thus have an extremely long port. Also, it's not a great idea for Pi speakers because the woofer is always called upon to produce the lower midrange band. This is not good for isobarik setups, and clamshell in particular.Adam

Subject: Re: Enclosure tuning questions
Posted by JLapaire on Fri, 05 Apr 2002 12:11:51 GMT
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"The only thing that differs it from a high tuned ported box is there is no response peak and the response rolls off shallow down to Fb, where it then rolls off."Is this the PIAlign scheme? The gradual roll off to a lower Fb?You responded fast, you must be right there.Thanks,John

Subject: Re: Enclosure tuning questions
Posted by Adam on Fri, 05 Apr 2002 13:26:39 GMT
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Yes it is. If you simulate PiAlign data in a box plot program, you'll get an early f3 around 80-90 Hz (depending on the driver of course, I'm talking for a typical Pro 15" such as the omega) with a shallow rolloff of about 5-6 db/octave to an Fb around 35 Hz.Adam

Subject: Thanks, sounds like a good trade-off. (nt)
Posted by JLapaire on Fri, 05 Apr 2002 14:05:15 GMT
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